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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/037,453	12/20/2001	Brad Allen Medford	8285/487	4820	
75	90 04/19/2006		EXAM	INER	
JOSEPH F. HETZ			REKSTAD, ERICK J		
BRINKS HOFE	ER GILSON & LIONE				
SUITE 3600			ART UNIT	PAPER NUMBER	
455 N. CITYFRONT PLAZA DR.			2621		
CHICAGO, IL 60611			DATE MAILED: 04/19/2000	DATE MAILED: 04/19/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/037,453	MEDFORD ET AL.					
Office Action Summary	Examiner	Art Unit					
	Erick Rekstad	2621					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONED	I. ely filed the mailing date of this communication. O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 28 Fe	ebruary 2006.						
· <u> </u>							
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-22</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-22</u> is/are rejected.	☑ Claim(s) <u>1-22</u> is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examine	r.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No.							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date	6) Other:	Tr					

Application/Control Number: 10/037,453

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DETAILED ACTION

This is an Office Action in response to the RCE filed on February 28, 2006 where in claims 1-22 are presented for examination.

Please note that the Examiner's art unit has changed from 2613 to 2621.

Response to Arguments

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 8-13, 15-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,778,607 to Zaccarin in view of US Patent 5,253,055 to Civanlar et al. and further in view of US Patent 6,335,760 to Sato. [claims 1-3]

As shown in Figures 3 and 4, Zaccarin teaches providing a plurality of encoded video streams. Further as shown in Figure 5, Zaccarin teaches MPEG encoding of the input stream using a DCT operation (504) (Col 5 Lines 54-61). Zaccarin further teaches the use of the plurality of encoded video streams in order to provide different bit-rates for optimal quality for different bandwidths (Col 5 Lines 9-26). Zaccarin further teaches the bit-rates are different (Col 5 Lines 45-47). As shown in Figure 3, Zaccarin teaches

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the compression using a single compression engine to provide the encoded signals at substantially the same time (Col 5 Lines 27-31 and Lines 45-47). Zaccarin further teaches the obtaining of the DCT coefficients once for the encoding engine (Col 5 Lines 58-61). Zaccarin does not teach the multiple streams being produced using different numbers of coefficient bits.

Civanlar teaches the prior art of a low-complexity method of scalable video encoding by sub-sampling the DCT coefficients. Civanlar further teaches such an encoding may be implemented using a slightly modified version of the MPEG-1 standard (Col 1 Lines 29-50). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the sub-sampling method of Civanlar with the encoding method of Zaccarin as both are MPEG based and the sub-sampling is a low-complexity method of scaling video as taught by Civanlar. Civanlar does not specifically teach the method of providing the DCT coefficients with different numbers of bits.

As shown in Figure 2, Sato teaches the encoding of an image using discrete cosine transform. Sato further teaches the ability to provide a DCT-encoded signals with different coefficient bits based on the capabilities of the user's display (Col 9 Line 48-Col 10 Line 29). Sato specifically teaches the second (6 bits) and third (4 bits) DCT-encoded signals are less then the first (8 bits) DCT-encoded signal as required by claims 1 and 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Sato with the encoding method of Zaccarin

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and Civanlar in order to provide multiple bitstreams at varying qualities using a simple DCT sub-sampling method as taught by Sato.

[claims 4-5]

As shown above Zaccarin teaches both DCT-encoded signals have different bandwidths and bit-rates (Col 5 Lines 9-16 and 45-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the DCT-encoding method of Sato with the plurality of outputs taught by Zaccarin in order to provide multiple users, with varying capabilities, a video signal.

[claim 6]

Zaccarin further teaches the signals are substantially synchronized (Col 5 Lines 32-44, Fig. 4).). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the DCT-encoding method of Sato with the plurality of outputs taught by Zaccarin in order to provide multiple users, with varying capabilities, a video signal.

[claims 8-13]

Zaccarin teaches the method stored in a computer readable medium for use by a general purpose computer (Col 2 Lines 40-55).

[claims 15-20]

As shown in Figure 1 of Sato and further in Figures 2, 3, 5 and 6 of Zaccarin, Sato and Zaccarin teach the system to perform the method of claims 1-6. [claim 22]

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As shown above, Sato teaches the removal of at least one lesser significant bit (Col 9 Lines 51-58 and Col 10 Lines 22-23).

Claims 7, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaccarin, Civanlar and Sato as applied to claims 1, 8, and 15 above, and further in view of US Patent 5,604,494 to Murakami et al.

[claims 7, 14, and 21]

Zaccarin, Civanlar and Sato teach the method and system for producing multiple encoded streams. Sato teaches the use of 8 bits for t. Zaccarin and Civanlar do not specifically teach the number of bits for each stream. Murakami teaches the use of 12, 13 or 14 bits as a common bit number to produce a compression rate of ½ (Col 18 Lines 28-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to use 12, 13 or 14 bits for the bit number of a stream in the system of Zaccarin, Civanlar and Sato in order to produce a compression rate of ½ as taught by Murakami.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 571-272-7338. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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